

(5) Claim 4 is amended to include the squareness of the board (original claim 2) and to eliminate the reference to the games manager.

## **(b) Novelty and non-obviousness of the claims**

(1) The novel part of the new Claim 1 is its last half, starting with “the game starts with an equal number ..”. It is novel and non-obvious because the game that the behaviour implements is radically different from all existing stones-on-grid games (E.g. Go, Othello, Rolit (the game that is described in Golad 6,231,331)), which are the games that such board would typically implement.

(2) The elements that differentiate this game from the other stones-on-grid games are:

- a) The most significant difference is that in the game that is described here each move may have a negative effect too, because points of the current player are being switched off as well as points of the other colour. This point is mentioned in the description in lines 6-8 on page 4. In other stones-on-grid games, a move has only positive effect, i.e. a move always increases the number of stones of the current player. This feature is quite counter-intuitive for most (maybe all) people, and gives the game a very different flavour from the other games.
- b) The game starts with the board relatively full (approximately 50%), in a random pattern, as opposed to empty or only few stones in fixed positions in the other games.
- c) The points are switched off (corresponding to stones being taken off) rather than points being switched on, as in typical games. This point is also quite counter-intuitive for many people.
- d) The idea of affecting a fixed pattern around the pressed point was never used in two-person games before the first priority document of this application.
- e) The point that is pressed is not necessarily affected in the current game and typically it is not, as opposed to all stones-on-grid games, where the pressed point is always affected.
- f) The game ends when there are no more points illuminated in one of the colours, rather than when the board is full (or is all “under control” in Go).

(3) Element (a) is completely novel. Elements (b)-(f) appeared sporadically in single-user puzzles, but not in two-person games, and even in single-user puzzles there are no combination of all the five of them. The combination of all of these elements in a two-person game gives a game which is radically different from all existing two-person games. Indeed, even now you still cannot find such a game on the internet (except my implementation in <http://maldoo.com>, *ClearIt*). Thus the behaviour that is described in Claim 1 is novel and non-obvious.

(4) Claim 4 describes specific patterns. The pair of patterns is clearly novel, and it is not obvious, because it is not obvious which patterns would give a game that is complex enough to be interesting, but not too complex to be incomprehensible.

## **(c) Responses to specific parts of the action**

**Double patenting** - The new Claim 1 is patentable over 6,568,683, because it describes a very different behaviour. The main difference is that in 6,568,683 the behaviour of the board is “fluid”, i.e. the pattern of illumination changes even when the player(s) don’t press any

point (column 3 line 47). This is the main novelty of 6,568,683 (explained in column 3, lines 53-58), and appears in its Claim 1 in column 8, lines 12-16. In contrast, the behaviour of the board in Claim 1 of the current application is “non-fluid”, i.e. the illumination pattern changes only when a player presses a point. Thus a board that behaves “fluidly” is outside the scope of Claim 1 but inside the scope of 6,568,683, while a board that behave only “non-fluidly” is outside of the scope of 6,568,683 but inside the scope of Claim 1 (if it behaves according to the second half). Hence the scopes of 6,568,683 and Claim 1 are patentably distinct, and therefore Claim 1 is patentable over 6,568,683.

In addition, in 6,568,683 pressing a point affects only its illumination (column 8, lines 17-19), while in Claim 1 a pattern of points around the pressed point is affected. This also separates the scopes of 6,568,683 and Claim 1.

**Claim Rejections - 35 USC 102** - As discussed in (b) above, The new Claim 1, in particular its second half, describes a novel and non-obvious behaviour with respect to all previous disclosures. In particular, the behaviour that is described in Golad 6,231,331 differs from the behaviour in Claim 1 in all the points that were listed in (b)(2) above. Thus the behaviour in the new Claim 1 is radically different from 6,231,331 and is not anticipated by it.

Thanks,

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## CLAIMS

1-3 (cancelled)

1 (New) An electronic board comprising a grid of grid points on a flat surface, where each grid point is a visible element which is capable of detecting when it is pressed, and an illumination source inside or below the surface which is capable illuminating the visible element by either of two colours;

which exhibits a behaviour which makes it useful for playing various games;

and in one of these games the behaviour of the board is as follows:

the game starts with an equal number of points illuminated in each of the two colours;

when a player presses a point, the board switches off points in the current player's colour that are in a fixed pattern with respect to the pressed point and points in the other colour that are in another fixed pattern with respect to the pressed point, and then makes the other colour the current player's colour;

when all the points that are illuminated are illuminated in the same colour, the board declares the player of this colour as winner.

4 (currently amended) A board as described in Claim 1, where the arrangement of the points is square, and when a player presses a point the games manager board switches off points of the player's colour which can be reached from the pressed point by moving three point along the line or the column that the pressed the point is in and then moving two points in orthogonal direction, and points of the opponent's colour which can be reached from the pressed point by moving two points along the row or the column and then moving one point in an orthogonal direction.

5-6 (cancelled)